

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

Listing of Claims:

1-24. (Cancelled).

25. (Currently Amended) In a computer network comprised of a plurality of different types of platforms for storing replicas of the same data, and wherein the limitations or features of a particular platform may require the data of a replica to be stored in a different physical arrangement at the data store layer of the particular platform, and wherein when synchronizing the replicas the data for each replica must be mapped from the different physical arrangement at each platform into a logical view table of a synchronization layer of the particular platform that ~~is substantially similar~~ has a similar layout to the logical view table at each of the other different types of platforms, a method for mapping of the physical layout of items in a data store layer of a platform to a logical view in a synchronization layer of the platform, the method comprising:

an act of compiling at the computer system of a particular platform a logical schema into a catalog that can be used to define a logical view that ~~is substantially the~~ has a similar layout to same for the logical view for each platform, and that includes a logical grouping of data items by defining the data items in terms of,

a change unit that defines the granularity of a group of data items in the sense that if any part of the group of data items is modified, the entire group of data items will be synchronized when synchronizing other replicas; and

a consistency unit, defining the minimum group of data items that must be reported during synchronization if any item of the group is changed; ~~and~~

an act of utilizing the catalog to map items from a physical layout to the logical view that ~~is substantially similar~~ has a similar layout to the logical view at different platforms of one or more other computer systems; and

an act of storing a synchronization tracker in the logical view table at the synchronization level for each platform, the synchronization tracker maintaining:

a version change enumeration corresponding to a synchronized version of a data item in the logical view of the computer system; and

a source identifier identifying a particular replica upon which the
synchronized version of the data item is based.

26. (Cancelled)

27. (Currently Amended) The method as defined in claim ~~26~~25, wherein the synchronization layer of the computer system includes a logical schema that is compiled into of one or more catalogs, the one or more catalogs being is-in extensible mark-up language (XML).

28. (Cancelled)

29. (Currently Amended) The method as defined in claim ~~28~~25, wherein the physical arrangement at the data store layer for each computer system is defined by one or more physical tables, and wherein the physical arrangement defined by the physical tables of at least one of the computer systems is different from the physical arrangement defined by the physical tables of the other computer systems.

30. (Previously Presented) The method as defined in claim 29, wherein the data store layer of each platform of each computer system where a replica is stored includes a user interface that includes procedures or functions code, the procedures or functions code being adapted to arrange the data for the replica in the physical tables of the data store layer.

31. (Cancelled)

32. (Currently Amended) The method as defined in claim-~~28~~29, further comprising:
an act of storing a local change tracker in the one or more physical tables at the data store layer of each platform, the local change tracker maintaining local change enumerations for items stored in the data store layer of a platform;
~~an act of storing a synchronization change tracker in the logical view table at the synchronization layer of each platform, the synchronization change tracker maintaining versions and synchronization local change enumerations for the items stored in the synchronization layer of a platform; and~~
wherein by comparing the local change tracker with the synchronization ~~local change~~ tracker, the computer system of each platform can determine if an item stored in the data store layer of the computer system should be sent and thus mapped to the logical view in the synchronization layer of the computer system.

33. (Currently Amended) The method of claim 32, wherein if the local change enumeration and the ~~synchronization local~~ version change enumeration comprise different values, then the item stored in the data store layer of the computer system should be mapped to the logical view.

34. (Currently Amended) The method of claim 32, wherein if the local change enumeration and the ~~synchronization local~~ version change enumeration comprise the same value, then the item stored in the data store layer of the computer system does not need to be mapped to the logical view.

35. (Currently Amended) The method of claim 32, wherein
a change in an item of data for a replica stored at a particular platform caused by a different version of the replica created by a computer system of another platform is identified by ~~a version ID~~ the source identifier ~~that correspondings~~ to the computer system of the other platform, and

wherein a change in an item of data for a replica stored at a particular platform caused by a change created in the one or more physical tables of the data store of the particular platform is identified by a change enumeration corresponding to a chronological order that the change was made.

36-41. (Cancelled)

42. (Currently Amended) In a computer network comprised of a plurality of different types of platforms for storing replicas of the same data, and wherein the limitations or features of a particular platform may require the data of a replica to be stored in a different physical arrangement at the data store layer of the particular platform, and wherein when synchronizing the replicas the data for each replica must be mapped from the different physical arrangement at each platform into a logical view table of a synchronization layer of the particular platform that ~~is substantially~~ has a similar layout to the logical view table at each of the other different types of platforms, a computer program product for implementing within the computer network a method for mapping of the physical layout of items in a data store layer of a platform to a logical view in a synchronization layer of the platform, the computer program product comprising a computer readable-medium having stored thereon computer-executable instructions for implementing the method, and wherein the method is comprised of:

an act of compiling at the computer system of the platform a logical schema into a catalog that can be used to define a logical view that ~~is substantially~~ has a similar layout to the same logical view for each platform, and that includes a logical grouping of data items by defining the data items in terms of,

a change unit that defines the granularity of a group of data items in the sense that if any part of the group of data items is modified, the entire group of data items will be synchronized when synchronizing other replicas; and

a consistency unit, defining the minimum group of data items that must be reported during synchronization if any item of the group is changed; ~~and~~

an act of utilizing the catalog to map items from a physical layout to the logical view that ~~is substantially~~ has a similar layout to the logical view at different platforms of one or more other computer systems; and

an act of storing a synchronization tracker in the logical view table at the synchronization level for each platform, the synchronization tracker maintaining:

a version change enumeration corresponding to a synchronized version of a data item in the logical view of the computer system; and

a source identifier identifying a particular replica upon which the synchronized version of the data item is based.

43. (New) The method as defined in claims 25 or 42, wherein the platform at each computer system wherein a replica is stored includes in the synchronization layer of the computer system a logical schema that is compiled into a catalog that can be used to define a logical view that has a layout which is similar for each platform.

44. (New) The method as defined in claims 25 or 42, wherein the physical arrangement at the data store layer of the platform for each computer system at which a replica is stored is defined by one or more physical tables for storing the data of the replica.

45. (New) The method as defined in claims 25 or 42, wherein
the data store layer of the platform for each computer system at which a replica is stored includes one or more folders in which items grouped in a common folder can be synchronized, thereby defining the scope of synchronization between synchronization layers of different platforms, and

wherein the items grouped in a common folder that can be synchronized are less than all of the items stored for a replica.